

In the Claims:

The below amended claims replace all previous claims in the application.

5   **What is claimed is:**

- 1   1. (currently amended) A bone plate with a longitudinal axis, a bone-contacting bottom side and  
2   a top side with at least one complex aperture each complex aperture comprised of at least one set  
3   of two overlapping holes having an offset of a given distance between centers thereof, such offset  
4   defining a necked down portion between the overlapping holes, each overlapping hole having  
5   female threaded surfaces formed therein adapted to lock with threads of a corresponding bone  
6   screw, each such set of overlapping holes which communicate communicating through the plate  
7   from the top to the bottom side, wherein the at least one set of overlapping holes defines a  
8   threaded aperture having multifaceted surfaces.
  
- 1   2. (original) The bone plate of claim 1, wherein the overlapping holes are formed normal to the top side  
2   of the plate.
  
- 1   3. (original) The bone plate of claim 1, wherein the overlapping holes are formed at an angle offset from  
2   normal to the top side of the plate.
  
- 1   4. (original) The bone plate of claim 1, wherein at least one of the overlapping holes is formed normal to  
2   the top side of the plate and at least a second of the overlapping holes is formed at an angle offset from  
3   normal to the top side of the plate.
  
- 1   5. (cancelled) ~~The bone plate of claim 1, wherein the multi-faceted surface is a coaxial series of annular~~  
2   ~~grooves.~~

1 6. (currently amended) The bone plate of claim[[s]] 1, wherein the threaded aperture further comprises  
2 multiple sets of overlapping holes.

1 7. (original) The bone plate of claim 6, wherein the overlapping holes are formed normal to the top side  
2 of the plate.

1 8. (original) The bone plate of claim 6, wherein the overlapping holes are formed at an angle offset from  
2 normal to the top side of the plate.

1 9. (original) The bone plate of claim 6, wherein at least one of the overlapping holes is formed normal to  
2 the top side of the plate and at least a second of the overlapping holes is formed at an angle offset from  
3 normal to the top side of the plate.

1 10. (currently amended) The bone plate of claim 6, wherein the multiple sets of overlapping holes are  
2 aligned on the longitudinal axis.

1 11. (original) The bone plate of claim 6, wherein the multiple sets of overlapping holes are positioned in a  
2 staggered arrangement from the longitudinal axis.

1 12. (original) The bone plate of claim 11, wherein the overlapping holes are formed normal to the top side  
2 of the plate.

- 1 13. (original) The bone plate of claim 11, wherein the overlapping holes are formed at an angle offset  
2 from normal to the top side of the plate.
- 1 14. (original) The bone plate of claim 11, wherein at least one of the overlapping holes is formed normal  
2 to the top side of the plate and at least a second of the overlapping holes is formed at an angle offset from  
3 normal to the top side of the plate.
- 1 15. (cancelled) ~~The bone plate of claim 1, wherein the multi-faceted surface is a threaded surface.~~
- 1 16. (original) The bone plate of claim 15, wherein the overlapping holes are formed normal to the top side  
2 of the plate.
- 1 17. (original) The bone plate of claim 15, wherein the overlapping holes are formed at an angle offset  
2 from normal to the top side of the plate.
- 1 18. (original) The bone plate of claim 15, wherein at least one of the overlapping holes is formed normal  
2 to the top side of the plate and at least a second of the overlapping holes is formed at an angle offset from  
3 normal to the top side of the plate.
- 1 19. (original) The bone plate of claim 1 wherein the set of overlapping holes is adapted to receive a bone  
2 screw with a head and a bone-engaging thread.
- 1 20. (original) The bone plate of claim 19, wherein the head of the bone screw has a plate engaging thread.

1 21. (original) The bone plate of claim 19, wherein the overlapping holes are formed normal to the top side  
2 of the plate.

1 22. (original) The bone plate of claim 19, wherein the overlapping holes are formed at an angle offset  
2 from normal to the top side of the plate.

1 23. (original) The bone plate of claim 19, wherein at least one of the overlapping holes is formed normal  
2 to the top side of the plate and at least a second of the overlapping holes is formed at an angle offset from  
3 normal to the top side of the plate.

1 24. (original) The bone plate of claim 1 wherein the set is comprised of two overlapping holes.

1 25. (original) The bone plate of claim 24, wherein the overlapping holes are formed normal to the top side  
2 of the plate.

1 26. (original) The bone plate of claim 24, wherein the overlapping holes are formed at an angle offset  
2 from normal to the top side of the plate.

1 27. (original) The bone plate of claim 24, wherein at least one of the overlapping holes is formed normal  
2 to the top side of the plate and at least a second of the overlapping holes is formed at an angle offset from  
3 normal to the top side of the plate.

- 1 28. (original) The bone plate of claim 1, wherein the set is comprised of three overlapping holes.
- 1 29. (original) The bone plate of claim 28, wherein the overlapping holes are formed normal to the top side  
2 of the plate.
- 1 30. (original) The bone plate of claim 28, wherein the overlapping holes are formed at an angle offset  
2 from normal to the top side of the plate.
- 1 31. (original) The bone plate of claim 28, wherein at least one of the overlapping holes is formed normal  
2 to the top side of the plate and at least a second of the overlapping holes is formed at an angle offset from  
3 normal to the top side of the plate.
- 1 32. (currently amended) An orthopaedic kit including:
- 2 a. a bone plate ~~according to claim 1 with a longitudinal axis, a bone contacting bottom side and~~  
3 ~~a top side with at least one set of overlapping holes which communicate through the plate from the top to~~  
4 ~~the bottom side, the overlapping holes defining a threaded aperture having multifaceted surfaces; and~~
- 5 b. at least one bone screw engagable with the bone plate.
- 1 33. (original) The kit of claim 32, further comprising a drill guide having a main drill guide surface and  
2 opposite end portions, one end portion of which is securely engageable with the multi-faceted surface of a  
3 hole in the bone plate so as to securely hold the drill guide in a desired orientation with respect to the  
4 bone plate for stabilizing a drill used in an orthopaedic procedure.

1 34. (currently amended) A bone plate with a longitudinal axis, a bone-contacting bottom side and a top  
2 side with a plurality of sets of overlapping holes each set comprised of at least two overlapping holes  
3 having an offset of a given distance between centers thereof and oriented along the longitudinal axis for  
4 securing the plate to a long bone, such offset defining a necked down portion between the overlapping  
5 holes, each overlapping hole communicating ~~which communicate~~ through the plate from the top to the  
6 bottom side, wherein each of the at least two overlapping holes of each set of overlapping holes have  
7 threads adapted to receive a bone screw with a threaded head and a bone engaging threaded shank.

1 35. (currently amended) A bone plate with a longitudinal axis, a bone-contacting bottom side and a top  
2 side with a plurality of sets of overlapping holes each set comprised of at least two overlapping holes  
3 having an offset of a given distance between centers thereof and oriented along the longitudinal axis for  
4 securing the plate to a long bone, such offset defining a necked down portion between the overlapping  
5 holes, each overlapping hole ~~which communicate~~ through the plate from the top to the bottom side, each  
6 of the at least two overlapping holes of each set of ~~the~~ overlapping holes having threaded surfaces  
7 adapted to receive bone screws with a threaded head and a bone engaging threaded shank, wherein the  
8 overlapping holes have centers substantially aligned along the longitudinal axis of the plate.

1 36. (currently amended) A bone plate with a longitudinal axis, a bone-contacting bottom side and a top  
2 side with a plurality of threaded apertures communicating through the plate from the top to the bottom  
3 side, at least one of the threaded apertures comprised of overlapping holes having an offset of a given  
4 distance between centers thereof and oriented along the longitudinal axis for securing the plate to a long  
5 bone, such offset defining a necked down portion between the overlapping holes, each overlapping hole  
6 having a threaded surface adapted to receive a bone screw with a head and a bone engaging thread, the  
7 overlapping holes further having centers staggered about the longitudinal axis of the plate.

1 37. (currently amended) A bone plate with a longitudinal axis, a bone-contacting bottom side having a  
2 total area and a top side with a plurality of threaded apertures which communicate through the plate from  
3 the top side to the bottom side, at least one of which is a set of overlapping holes having an offset of a

4 given distance between centers thereof and oriented along the longitudinal axis for securing the plate to a  
5 long bone, such offset defining a necked down portion between the overlapping holes, each overlapping  
6 hole, wherein the overlapping holes have multifaceted surfaces and wherein the bottom side includes  
7 recesses located between adjacent threaded apertures and which are substantially located exclusively on  
8 the bottom side, the recesses being sized so as to define a cross-section transverse to the longitudinal axis  
9 and across the recesses that ensures that a yield strength in bending across the recesses is less than across  
10 a threaded aperture.

1 38. (original) he bone plate of claim 37, wherein the recesses are substantially rectangular in form.

1 39. (original) The bone plate of claim 37, wherein the recesses are equally spaced along the longitudinal  
2 axis.

1 40. (original) The bone plate of claim 37, wherein the total area removed from the bottom side due to the  
2 recesses is less than or equal to 50% of the total surface area of the bottom side.

1 41. (original) The bone plate of claim 37, wherein the recesses are transverse and extend across the width  
2 of the bone plate.

1 42. (original) The bone plate of claim 37, wherein the recesses extend from a side of the bone plate  
2 transversely toward the longitudinal axis but do not cross the axis.